

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/004314

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F21V5/04 G09F19/18 G02B3/06 F21V7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F21V G02B G09F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 847 734 A (KATOH ET AL) 11 July 1989 (1989-07-11) figure 2 column 3, line 1 - line 18	1, 2, 4-6
Y	-----	7, 8
X	EP 0 071 052 A (MORI, KEI) 9 February 1983 (1983-02-09) page 5, line 35 - page 6, line 13 figures 4, 5	1, 4, 5
Y	-----	7, 8
Y	US 6 536 921 B1 (SIMON JEROME H) 25 March 2003 (2003-03-25) paragraph '0175! figure 50	7
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *&* document member of the same patent family

Date of the actual completion of the international search

23 March 2005

Date of mailing of the international search report

07/04/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/181234 A1 (KAWAHARA JAMIE) 5 December 2002 (2002-12-05) figures 6,8,9 -----	8
A	US 6 116 757 A (SIMON ET AL) 12 September 2000 (2000-09-12) claim 1 figure 7 -----	1
A	US 6 481 130 B1 (WU CHEN-HO) 19 November 2002 (2002-11-19) figure 9 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/004314

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4847734	A	11-07-1989	JP 1037158 A KR 9203162 B1	07-02-1989 20-04-1992
EP 0071052	A	09-02-1983	JP 1334137 C JP 58021205 A JP 60058443 B AU 534080 B2 AU 8648282 A DE 3268655 D1 EP 0071052 A2 HK 21887 A MY 34987 A NZ 201160 A SG 88986 G	28-08-1986 08-02-1983 20-12-1985 05-01-1984 17-03-1983 06-03-1986 09-02-1983 20-03-1987 31-12-1987 12-07-1985 13-11-1987
US 6536921	B1	25-03-2003	US 5897201 A WO 9913266 A1	27-04-1999 18-03-1999
US 2002181234	A1	05-12-2002	NONE	
US 6116757	A	12-09-2000	US 5863115 A	26-01-1999
US 6481130	B1	19-11-2002	NONE	